## ITED STATES PATENT AND TRADEMAR

Haines, et al.

Examiner:

Li, Zhuo H

al No.:

09/778,130

Group Art Unit:

2186

February 6, 2001

Docket:

STL10033/40046.149USU1

GP2186

Confirmation No.:

3191

Notice of Allow. Date:

Title:

A SYSTEM FOR CHARACTERIZING PERFORMANCE OF DATA HANDLING SYSTEMS

UNDER PARTICULAR STIMULI

**CERTIFICATE UNDER 37 CFR 1.10:** 

"Express Mail" mailing label number: EV109395436US

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MERCHANT & GOULD P.C. P.O. Box 2903, Minneapolis, MN 55402-0903 303.357.1670

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Reg. No.: 33,044 JRWahl/mcn

M 09/778,130

#5 12-3-03 PATENT

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Name: Mary C/Notter

**RESPONSE** 

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## Dear Sir:

This response is directed to the Office Action mailed on August 19, 2003, setting a three month shortened statutory period for response expiring on November 19, 2003. Applicant respectfully requests reconsideration in view of the following remarks.

Claims 1-18 and 20 stand rejected. Claim 19 is objected to as containing allowable subject matter but depending from a rejected base claim. Claims 1-10, 12-18 and 20 are rejected under 35 USC 102(e) as anticipated by US Patent No. 6,385,673 (DeMoney). The Examiner is respectfully requested to reconsider and withdraw this rejection as its basis is flawed.

DeMoney discloses a data handling system for ensuring adequate buffer availability to be able to handle multiple streams at the same time without running into a limiting data throughput

situation, i.e. a worst case throughput scenario. In contrast, Applicant's system is designed specifically to generate the worst-case situation, by overloading the available buffer, measure the throughput under that condition, and test this against a predetermined threshold. DeMoney does not do that.

The examiner states first that DeMoney discloses a data handling system 300 having a cache and equates DeMoney's buffer ring 405 as the cache. He then states that DeMoney includes a step of "sending commands to the data handling system for a set of data blocks that are <u>large relative to a size of the cache dedicated for the commands</u>". Applicants respectfully assert that this step is NOT present in DeMoney.

In contrast, DeMoney, col. 11, line 24 - col. 12, line 35, states that incoming data stream is examined in the stream manager 404 and sizes the buffers so as to never be overloaded. The stream manager 404 adjusts the size and number of the buffers in the buffer ring 405 to each handle one block of incoming data: "Each ring 405 of N buffers is used to hold the next N blocks of the continuous media stream to be accessed by the requester." DeMoney never neutralizes the buffer or the buffer ring, and never sends sets of data blocks too large for the buffer assigned.

In order to establish a prima facie case of anticipation under 35 USC 102, each and every element and limitation must be found in the single reference. This has NOT been established by the Examiner in citing DeMoney. Accordingly, this rejection is without merit and should be withdrawn.

Second, the examiner states that DeMoney discloses comparing the measured block service time to a first threshold and scoring the system based on the comparison, citing Col. 12, line 3 through Col. 13, line 61 and Col. 15, lines 37-55. Contrary to the examiner's assertion, DeMoney does not compare a measured block service time to a threshold and score the system accordingly. DeMoney discloses a "threshold" only at col. 13, line 53, in connection with calculation of a metadata deadline for scheduling the fetch of a next indirect block of metadata from the storage system. This "threshold" has no relation to the block service time for a large block size in a cache as Applicants claim.

For all of the above reasons, it is submitted that the rejection of independent claims 1 and 13, each requiring the sending of commands to the data handling system for a set of data blocks that are large relative to a size of the cache dedicated for the commands, recording a block service time for each large data block, comparing the block service time to a first threshold and scoring the data handling system based on the comparison, as anticipated by De Money, is without merit and should be withdrawn. As each of the dependent claims 2-10 and 14-18 include the same limitations that are not set forth in DeMoney, the rejection under 35 USC 102(e) of these claims is without merit and should also be withdrawn.

Claim 20 stands rejected as anticipated by DeMoney as well. DeMoney does not disclose a method and performance characterization system for a data handling system in which the cache is purposely masked by sending to it a set of data blocks that are large relative to the size of the cache in order to measure the block service time and score the system based on a comparison with a first threshold, as is described in Applicants' specification. Again, the examiner has failed to show that each and every claim limitation is present in DeMoney, and therefore has failed to set forth a prima facie case of anticipation under 35 USC 102(e). The rejection of this claim should also be withdrawn.

Claim 11 stands rejected under 35 USC 103(a) as obvious over DeMoney. A prima facie case of obviousness in this case can only be established if the DeMoney reference teaches or suggests each and every limitation of claim 11, coupled with a showing that there is a suggestion or motivation to modify the reference, AND a reasonable expectation of success in this modification. The examiner states "DeMoney teaches a third threshold with alternate block size than the first threshold because it eliminates the worst possible service time for the request will exceed the deadline or maximum service time." First of all, the sentence does not make sense. The undersigned attorney does not understand what is meant by the "because" portion of the sentence. Second, DeMoney never lets a block size exceed the size of the buffer allocated to the stream and therefore cannot test the worst-case service time against any threshold. Therefore the examiner has not demonstrated a teaching or suggestion in

DeMoney of EACH AND EVERY limitation in claim 11. This rejection should be withdrawn as a prima facie case of obviousness has not been established.

Finally, claim 19 stands objected to as depending from a rejected base claim. As claim 13 is believed to be fully allowable for the reasons set forth above, this objection is believed to be misapplied and should be withdrawn.

Claims 1-20 remain pending in the application. No amendments have been made. This response is believed to be responsive to all points in the office action. Applicant respectfully requests a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this Application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

Date

Customer No.: 23552

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